



**METROPOLITAN
TRANSPORTATION
COMMISSION**

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
Tel.: 510.464.7700
TTY/TDD: 510.464.7769
Fax: 510.464.7848
e-mail: info@mtc.ca.gov
Web site: www.mtc.ca.gov

James P. Spering, Chair
Solano County and Cities

James T. Beall Jr., Vice Chair
Santa Clara County

Keith Axtell
U.S. Department of Housing
and Urban Development

Jane Baker
Cities of San Mateo County

Sharon J. Brown
Cities of Contra Costa County

Mark DeSautiers
Contra Costa County

Dorene M. Giacomini
U.S. Department of Transportation

Mary Griffin
San Mateo County

Eliba Harris
Cities of Alameda County

Tom Hsieh
City and County of San Francisco

Mary V. King
Alameda County

Steve Kinsey
Marin County and Cities

Jean McCown
Cities of Santa Clara County

Charlotte B. Powers
Association of Bay Area Governments

Jon Rubin
San Francisco Mayor's Appointee

Angelo J. Siracusa
San Francisco Bay Conservation
and Development Commission

Kathryn Winter
Napa County and Cities

Sharon Wright
Sonoma County and Cities

Harry Yabata
State Business, Transportation
and Housing Agency

Lawrence D. Dabms
Executive Director

William F. Hein
Deputy Executive Director

**BAY BRIDGE DESIGN TASK FORCE
ENGINEERING AND DESIGN
ADVISORY PANEL
Friday, October 9, 1998
1 p.m.
Joseph P. Bort MetroCenter Auditorium
101 Eighth Street
Oakland, California 94607**

Chairperson: Joseph Nicoletti
Vice Chair: John Kriken
Staff Liaison: Steve Heminger

FINAL AGENDA - REVISED

1. Welcome and introductions - John Kriken, Vice Chair
2. Approval of draft meeting record for May 29 meeting*
3. Summary of Bay Area Toll Authority recommendations and upcoming schedule of EDAP meetings - Steve Heminger, MTC*
4. Status report on new eastern span project - Denis Mulligan, Caltrans
5. Presentation of detailed design information on recommended new eastern span - Brian Maroney, Caltrans, and TY Lin design team**
 - Oakland touchdown
 - Yerba Buena Island concepts
 - Skyway design
 - Bicycle/pedestrian path
6. EDAP discussion and comments
7. Other business/public comment

* Attachment sent to members, key staff, and others as appropriate. Copies available at meeting.

** Attachment to be distributed at meeting.

Public Comment: The public is encouraged to comment on agenda items at committee meetings by completing a request-to-speak card (available from staff) and passing it to the committee secretary or chairperson. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Record of Meeting: MTC meetings are tape recorded. Copies of recordings are available at nominal charge, or recordings may be listened to at MTC offices by appointment.

Sign Language Interpreter or Reader: If requested three (3) working days in advance, sign language interpreter or reader will be provided; for information on getting written materials in alternate formats call 510/464-7787.

Transit Access to MTC: BART to Lake Merritt Station. AC Transit buses: #11 from Piedmont or Montclair; #59A from Montclair; #62 from East or West Oakland; #35X from Alameda; #36X from Hayward.

Parking at MTC: Metered parking is available on the street. No public parking is provided.

**BAY BRIDGE DESIGN TASK FORCE
Engineering and Design Advisory Panel
May 29, 1998 Meeting
Metropolitan Transportation Commission**

Draft Record of Meeting

Panel Attendance

Joseph Nicoletti (Chair), John Kriken (Vice Chair), Karen Alschuler, Christopher Arnold, Bruce Bolt, Roger Borchardt, Robert Brown, Jerry Fox, Jeffrey Heller, Ephraim Hirsch, Manabu Ito, T.Y. Lin, Jim McCarty, Roumen Mladjov, Alexander Scordelis, Frieder Seible, Peter Taylor, Steve Thompson, and Thomas Wosser.

Approval of draft meeting record for May 18 meeting

The minutes were approved as presented.

Presentation of additional information on single-tower bridge designs

James van Loben Sels, Director of Caltrans, introduced the presentation, announced the completion of 30% design for the two single-tower alternatives, and urged EDAP and MTC to proceed to final recommendations on bridge design.

Karen Cormier of Caltrans presented information on span optimization studies and the following three alternatives for the causeway portion of the bridge: haunched concrete, constant depth concrete, and constant depth steel. She reported the studies' conclusion that the optimum span length for the three alternatives was 155-165 meters for haunched concrete, 120-144 meters for constant depth concrete, and 160 meters for constant depth steel.

Herb Rothman and Don MacDonald of the TY Lin design team presented further engineering, architectural, seismic performance, and other design information on the single-tower self-anchored bridge option, including a revised design that featured refinements to the tower design, moving the tower 35 meters closer to Yerba Buena Island, and a significantly longer and asymmetrical main span of 385 meters. In response to questions from panel members, Mr. Rothman indicated that the movement of the tower location meant that the number of piles supporting the tower could be reduced due to the new location, and that the western pier for the back span would need to have added mass to prevent uplift caused by the asymmetrical design.

Rafael Manzanarez and Tom Piotrowski of the TY Lin design team presented further engineering, architectural, seismic performance, and other design information on the single-tower cable-stayed bridge option. The cable-stayed design essentially was unchanged from the May 18 EDAP meeting. In response to questions, Mr. Manzanarez indicated that the main span could be lengthened from 275 meters to approximately 300 meters, but could not be lengthened further because of EDAP's requirement that the east span tower height not exceed the west span towers.

Victoria Eisen representing Caltrans' bicycle and pedestrian advisory committee conveyed that committee's preferences on bicycle/pedestrian path(s) in the following priority order: (1) two paths each 10 feet wide and 1 foot above deck level on the south and north sides of the new spans, with one path reserved for bicycle use and the other

for pedestrian use; (2) 1 path 15 feet wide and 1 foot above deck level on the south side of the eastbound deck, with all users on this single path; or (3) 1 path 15 feet wide also on the south side of the eastbound deck, but at least 3.5 feet below deck level.

Brian Maroney of Caltrans concluded the presentation by summarizing the incremental cost over the baseline bridge associated with the single-tower bridge alternatives (\$102-173 million depending on the main span type and causeway design) and bicycle/pedestrian paths (\$33-72 million depending on the path option selected).

Public Comment

The following members of the public made comments:

- Samir Bazel - supporting two paths for bicycles and pedestrians
- Michael Newman - regarding design criteria for new span, especially tower height
- Chentung Hsue - supporting cable-stayed design
- Terry Roberts - expressing City of Oakland's concerns about causeway design
- Daniel Coman - expressing dissatisfaction with design process
- Rick Feher - expressing dissatisfaction with design process
- Diane Woolley - supporting bicycle/pedestrian path and accommodation of heavy rail on new span
- Ken Bukowski - supporting accommodation of heavy rail on new span
- Sandra Threlfall - supporting bicycle/pedestrian path
- Leon Rimov - supporting two paths for bicycles and pedestrians
- Jason Meggs - supporting 22 foot wide bicycle/pedestrian path
- Mario Ciampi - presenting alternative bridge design
- Joe Carroll - supporting bicycle/pedestrian path
- Bryan Foster - recommending retrofit of existing bridge
- George Lythcott - expressing Oakland Landmarks Board's concerns about causeway design
- Alex Zuckerman - supporting Caltrans' bicycle and pedestrian advisory committee recommendations
- Gerald Smith - expressing Assemblyman Don Perata's support for improved causeway design, bicycle/pedestrian access, and accommodation of light and heavy rail on the new span
- Steven Lowe - expressing West Oakland Commerce Association's concerns design of new span

EDAP deliberations and recommendations

Chair Joseph Nicoletti invited the panel members to make individual comments on the bridge designs recommended by the design teams and other relevant issues, which are summarized as follows:

Jerry Fox expressed his support for the single-tower cable-stayed design with a constant depth causeway.

Frieder Seible also expressed support for the cable-stayed main span with a constant depth causeway. He said the panel lacked sufficient information to evaluate different

bicycle/pedestrian options, and that the question of whether the constant depth causeway should be constructed of steel or concrete should be left open and decided in the bidding process.

Manabu Ito supported the cable-stayed design and indicated that, while there may be many cable-stayed bridges in Asia, there are not enough in California.

Bruce Bolt commended the tower designs of both teams but said that he preferred the revised self-anchored suspension design because the tower had been moved closer to Yerba Buena Island and the longer, asymmetrical main span was pleasing.

Jeffrey Heller said that since seismic and cost issues were relatively equal between the two bridge types, the choice came down to an aesthetic preference, and that his was the suspension design. He also expressed support for one bicycle/path on the south side of the bridge above deck, and for the accommodation of future light rail on the new span.

Steve Thompson said that although the revised suspension design was more handsome, he preferred the symmetry of the cable-stayed design. He supported two bicycle/pedestrian paths, rail on the new span, and a steel causeway.

Karen Alschuler said both designs had improved since the original schemes, but that she preferred the suspension design because it is more consistent with the west spans and because the asymmetry of the main span is visually appealing. She favored one bicycle/pedestrian path 15 feet wide and 1 foot above deck on the south side of the new bridge.

Chair Joseph Nicoletti commended the work of both design teams, but expressed his preference for the suspension design with the haunched concrete causeway.

Vice Chair John Kriken expressed his support for the suspension design because of its asymmetry and new tower location, for a haunched causeway because it carries through the catenary curve of the suspended main span, and for one bicycle/pedestrian path 15 feet wide, although he indicated concern about a path above deck harming the views of motorists.

Ephraim Hirsch supported the suspension design with a uniform depth steel causeway. He also suggested that the tower design was still too bulky, but that the remaining 70% design process should allow for refinement.

Christopher Arnold said that both designs were very close in quality, that the suspension design had improved enormously, but that he still preferred the cable-stayed design. He also supported the haunched causeway design, and indicated that the design teams should continue to pursue various bicycle/pedestrian options.

Peter Taylor did not express a preference between the cable-stayed and suspension designs, but questioned whether the suspension design's \$50 million in additional cost could be better spent on other bridge amenities. He also said that several elements of the design need considerable work, including the Yerba Buena Island transition and the causeway design.

Roumen Mladjov supported the suspension main span with a steel causeway, and also expressed concerns about whether the new bridge would provide sufficient capacity to meet future traffic demand.

Thomas Wosser supported the suspension design and also the proposal to resolve the question of a steel or concrete causeway in the bidding process.

Robert Brown supported the suspension design with a haunched causeway, and also supported one bicycle/pedestrian path 15 feet wide and 1 foot above the roadway.

Roger Borchardt favored the suspension design and urged Caltrans to consider less northerly alignments for the new span

T.Y. Lin strongly favored the cable-stayed design and suggested that the cable-stayed design also could achieve a significant asymmetry in the main span if the design team were given additional time to modify its design.

Alexander Scordelis supported the cable-stayed design and cautioned that, once the 30% design choice is made, the bridge should not be designed by committee.

Jim McCarty supported the suspension design and suggested that the question of including a bicycle/pedestrian path be given further study.

At the conclusion of the presentation of individual views, EDAP approved the following three motions:

1. The new eastern span should be a single-tower self-anchored suspension bridge. (motion by Bolt, seconded by Heller; approved 12-7)
2. The causeway section of the new eastern span should be constructed of either concrete with a variable depth profile or steel with a constant depth profile, with a minimum span length of 160 meters except near the Yerba Buena Island transition and approaching the Oakland touchdown. (motion by Hirsch, seconded by Kriken, amended by Wosser; approved 12-5, with 1 abstention)
3. The new eastern span should have a single bicycle/pedestrian path on the south side of the eastbound deck, with a width and height (in relation to the deck) adequate to ensure the safety and comfort of path users and protect the views of motorists. (motion by Alschuler, seconded by Kriken; approved 13-1, with 2 abstentions)



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item No. 3

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
Tel.: 510.464.7700
TTY/TDD: 510.464.7769
Fax: 510.464.7848
e-mail: info@mtc.ca.gov
Web site: www.mtc.ca.gov

June 29, 1998

James P. Spering, Chair
Solano County and Cities

James T. Beall Jr., Vice Chair
Santa Clara County

Keith Axtell
U.S. Department of Housing
and Urban Development

Jane Baker
Cities of San Mateo County

Sharon J. Brown
Cities of Contra Costa County

Mark DeSaulnier
Contra Costa County

Dorene M. Giacomini
U.S. Department of Transportation

Mary Griffin
San Mateo County

Elibu Harris
Cities of Alameda County

Tom Hsieh
City and County of San Francisco

Mary V. King
Alameda County

Steve Kinsey
Marin County and Cities

Jean McCown
Cities of Santa Clara County

Charlotte B. Powers
Association of Bay Area Governments

Jon Rubin
San Francisco Mayor's Appointee

Angelo J. Siracusa
San Francisco Bay Conservation
and Development Commission

Kathryn Winter
Napa County and Cities

Sharon Wright
Sonoma County and Cities

H. nyY''''''''
State Business, Transportation
and Housing Agency

Lawrence D. Dahms
Executive Director

William F. Hein
Deputy Executive Director

To: Engineering and Design Advisory Panel

Fr: Executive Director

In August 1997, Governor Wilson signed into law Senate Bill 60, which brought to a close a four-year-old impasse over how to pay for the seismic retrofit and replacement of the Bay Area's state-owned toll bridges. The bill also delegated to the Metropolitan Transportation Commission—acting as the Bay Area Toll Authority (BATA)—the selection of a design for the new eastern span of the San Francisco-Oakland Bay Bridge. At its meeting on June 24, 1998, the Commission fulfilled this responsibility by adopting BATA Resolution No. 10, a copy of which is enclosed for your information together with two recent newspaper editorials.

Specifically, the resolution requests that Caltrans extend the \$1 seismic retrofit toll surcharge for approximately 15 months to pay for two of the three "amenities" authorized under SB 60: a single-tower self-anchored suspension span adjacent to Yerba Buena Island and a bicycle/pedestrian path on the eastbound deck of the new span. The Commission deferred any action on the third eligible amenity—relocation or replacement of the Transbay Transit Terminal in San Francisco—until staff has completed a cost analysis of various options for improving the terminal. A copy of BATA's separate motion on the Transbay Terminal also is enclosed.

As you may know, the Commission's design selection is not without controversy, but few decisions of any importance in the Bay Area occur without controversy. I can assure you, however, that we conducted one of the most open and inclusive design review processes for a major public works project in the region's history. Over the course of 16 months, we conducted 15 public hearings; heard from thousands of Bay Area residents via letter, phone calls, e-mail, and opinion polls; reviewed more than a dozen different bridge design proposals presented by private firms and Caltrans; and received expert advice on seismic performance and bridge design issues from a blue-ribbon panel of 34 architects, engineers, and geologists. While we may not have pleased every critic, we have afforded every critic an opportunity to comment and influence the design.

Moreover, the design process is by no means complete. We have reached the 30% stage of completion, which means that 70% of the detailed design work is yet to come. Over the next year, BATA Resolution No. 10 provides that the Commission and our blue-ribbon panel will continue to provide design oversight on such critical issues as the design of the long causeway section of the bridge and its touchdowns at the Yerba Buena Island tunnel and the Oakland shore. This continuing design oversight will, of course, allow ample opportunity for public comment and improvement of the current design.

We look forward to working with Caltrans and all interested stakeholders in the remaining design phase for the eastern span. We remain committed to ensuring that the region receives a safe and handsome new bridge at the earliest possible date. On behalf of the Commission, I especially want to thank the members of the Engineering and Design Advisory Panel for their dedicated service to date, and hope that we can continue to borrow your valuable time and professional expertise in the remaining phase of design.



Lawrence D. Dahms

LDD/SH/lw
Enclosures

Date: June 24, 1998
W.I.: 15-1-10
Referred By: BBTF

ABSTRACT

BATA Resolution No. 10

This resolution approves the extension of the seismic retrofit surcharge to pay for Bay Bridge amenities.

Further discussion of this resolution is contained in the Executive Director's memorandum on Bay Bridge Design Task Force Recommendations dated June 17, 1998.

Date: June 24, 1998
W.I.: 15-1-10
Referred By: BBTF

RE: Extension of Seismic Retrofit Surcharge for Bay Bridge Amenities

BAY AREA TOLL AUTHORITY

RESOLUTION NO. 10

WHEREAS, Streets and Highways Code Section 30950 creates the Bay Area Toll Authority (BATA), which is the same as the Metropolitan Transportation Commission (MTC); and

WHEREAS, Streets and Highways Code Sections 30950 *et seq.* transfers to BATA certain California Transportation Commission and California Department of Transportation (Department) duties and responsibilities for the bridges owned and operated by the Department in the San Francisco Bay Area; and

WHEREAS, the bridges subject to this transfer of duties and responsibilities are defined in Streets and Highways Code Section 30910 to include the Antioch, Benicia-Martinez, Carquinez, Richmond-San Rafael, Dumbarton, San Mateo-Hayward, and San Francisco-Oakland Bay bridges; and

WHEREAS, Streets and Highways Code Section 31010 imposes a seismic retrofit surcharge of one dollar (\$1) per vehicle for passage on the Bay Area toll bridges defined above; and

WHEREAS, Streets and Highways Code Section 31015 authorizes BATA to request funding for certain amenities associated with the new eastern span of the Bay Bridge defined to include (1) a design of the new eastern span of the Bay Bridge that costs more than the cost of a single tower cable-suspension bridge selected by the Department, (2) replacement or relocation of the transbay bus terminal in the City and County of San Francisco, and (3) bicycle or pedestrian access on the new eastern span, and requires the Department to include any of the amenities requested by BATA if sufficient funds generated by the seismic retrofit surcharge are available to fully pay for those amenities; and

WHEREAS, Streets and Highways Code Section 31050(a)(2) permits the extension of the seismic retrofit surcharge by up to two additional years to pay for the amenities requested by BATA; and

WHEREAS, a two-year extension is estimated by BATA to generate approximately two hundred thirty million dollars (\$230,000,000); and

WHEREAS, since February 1997, MTC's and subsequently BATA's Bay Bridge Design Task Force (Task Force) has conducted extensive public outreach and reviewed the advice of the Department staff, private design teams retained by the Department, and an engineering and design advisory panel (EDAP) composed of bridge engineers, architects, and geologists in order to develop recommendations to BATA regarding Bay Bridge eastern span amenities; and

WHEREAS, on July 30, 1997, MTC adopted planning and design recommendations to guide the development of the design of the new eastern span and amenities; and

WHEREAS, on June 10, 1998, EDAP provided the Task Force with its recommendations after completion of 30 percent of the design of the new eastern span; and

WHEREAS, on June 22, 1998, the Task Force, guided by the planning and design recommendations previously adopted by MTC, and EDAP's recommendations, met and recommends extending for 14.7 months the seismic retrofit surcharge on Bay Area bridges to generate an estimated one hundred forty one million dollars (\$141,000,000) to pay for certain amenities, listed in Attachment A to this resolution and incorporated herein as though set forth in full; and

WHEREAS, the Task Force recommends a number of other actions and future actions regarding additional amenities and bridge design; now, therefore, be it

RESOLVED, that BATA approves the extension of the seismic retrofit surcharge by 14 months and 3 weeks to generate an estimated \$141,000,000 to pay for the Bay Bridge eastern span amenities included in Attachment A of this Resolution; and, be it further

RESOLVED, BATA supports the recommendation that the pile caps for the piers supporting the connecting section of the new bridge be placed above water, with careful attention to the design, and authorizes the Task Force and EDAP to provide continuing design oversight of the remaining design phase for the new eastern span, including, not but not limited to, the

following key issues: the Yerba Buena Island transition and possible replacement ramps, the design of the causeway section of the bridge, and the Oakland touchdown; and, be it further

RESOLVED, that the BATA Executive Director is directed to take all actions necessary within his authority to carry out the recommendations included herein; and, be it further

RESOLVED, that the BATA staff is directed to distribute copies of this Resolution to the Director of the Department, the Department's District 04 Director, members of the Bay Area state legislative and congressional delegations, the Bay Conservation and Development Commission, and members of EDAP.

BAY AREA TOLL AUTHORITY


James P. Sperry, Chair

The above resolution was entered into by the Bay Area Toll Authority at a regular meeting of the Authority held in Oakland, California on June 24, 1998.

Date: June 24, 1998
W.I.: 15-1-10
Referred By: BBTF

Attachment A
BATA Resolution No. 10
Page 1 of 1

San Francisco-Oakland Bay Bridge East Span Replacement Project

1. The new eastern span should have a single-tower self-anchored steel suspension long span at Yerba Buena Island with a variable depth concrete causeway connecting the long span to the Oakland shore.

Incremental cost: \$91 million from the extension of the seismic retrofit surcharge

Toll surcharge extension: 9.5 months

2. The new eastern span should have bicycle/pedestrian access permanently guaranteed with a single bicycle/pedestrian path 15.5 feet wide and 1 foot above deck level on the south side of the eastbound deck.

Incremental cost: \$50 million from the extension of the seismic retrofit surcharge

Toll surcharge extension: 5.2 months

Total period of toll surcharge extension - 14.7 months (14 months and 3 weeks)

Corrected on July 2, 1998

Motion on the TransBay Terminal 6/24/98

In order for the Bay Area Toll Authority to develop its position on whether to request the extension of the seismic retrofit surcharge to provide toll bridge funds for replacement or relocation of the Transbay Terminal, staff is directed to prepare a long-term capital and operating cost analysis of three options to improve the Transbay Terminal:

- (a) renovate the existing facility;
- (b) replace the existing facility with a new facility on the same site;
- (c) relocate the existing facility to a new facility at Howard and Beale Streets

BATA requests that Caltrans delay demolition of the east ramp to the existing facility until the study results are known. BATA further requests AC Transit, the City and County of San Francisco, Caltrans, and other affected stakeholders to meet and confer concurrent with the conduct of the cost analysis to seek consensus on a supported option for improvement of the Transbay Terminal. BATA reserves its right, however, to make the final decision on the expenditure of toll bridge funds that it is responsible for on improvements related to the Transbay Terminal.

CONGRESS shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press, or of the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

FIRST AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES, RATIFIED DEC. 15, 1791

EDITORIALS

Bridge design process conformed to the rules

IT'S no surprise that when it comes to aesthetics in an region as diverse as the Bay Area, achieving a consensus is as difficult as trying to sell a Raiders personal seat license.

And true to form, when it came to deciding what the new eastern span of the Bay Bridge should look like, disagreement was the order of the day, except on the Metropolitan Transportation Commission. The MTC voted Wednesday 11-1 to accept the recommendation of the Bay Bridge Design Task Force to construct a single suspension bridge with a viaduct connecting the span and the East Bay.

In the end, though, San Francisco Mayor Willie Brown, Oakland Mayor Elihu Harris and Oakland Mayor-elect Jerry Brown all called for a "better design."

Harris, who cast the lone dissenting vote on the MTC, has been a longtime critic of the single suspension bridge because it failed to address rail options. His voice did not convince the other MTC members, and that's key here. This process has been conducted in public, with the other two designs receiving as much publicity as the suspension bridge.

The MTC and the task force led by Alameda County Supervisor Mary King were responsible for coming up with a new design with the primary task of providing Bay Area commuters with a span engineered more seismically safe than the current Bay Bridge. This was not a window-dressing issue.

Not on the board

The hue and cry has come primarily from a handful of elected leaders who did not sit on the MTC board, with the exception of Harris. The public has been paying the additional \$1 toll since Jan. 1, so if this design was hideous to the untrained eye, we would have no doubt heard.

What we did hear early on in the process was that bicyclists wanted bike lanes on the new structure, and they received them. At an additional cost of \$50 million, pedaling over the bridge will be a reality.

At the beginning of the discussions, the bike lanes were thought to be the sticking point, but that didn't turn out to be the case. The contention has arisen over the aesthetics of the design, which we're told allows for flexibility such as off-ramps to Yerba Buena Island, an element San Francisco Mayor Brown demands.

Fair compromise

The addition of the suspension portion will add \$90 million to the cost of the less-expensive viaduct design, and we see this as a compromise to the critics who

call the viaduct design a highway on stilts — the design is similar to that of the Hayward-San Mateo Bridge.

Pragmatism would dictate making the entire span a viaduct. It's the cheapest option. The single suspension allows for the grandeur of a bridge one would expect in the Bay Area, but the eastern viaduct portion is practical and — despite Jerry Brown's condemnation — it will give beautifully unobstructed views of Oakland and the East Bay.



Mayor-elect Jerry Brown also alleged this was railroaded through the "old boys network," since engineers who drew up the design options participated in the process. Certainly, our confidence in the design would be considerably shaken if there were no bridge-building experts consulted. The public cannot rely on the safety of a bridge engineered only by politicians wanting to put their imprint on a \$1.5 billion structure.

We believe nothing has been forced through. The MTC has done an excellent job over the past 16 months at making this entire process open to the public, conducting hearings with the public and finally recommending a design and voting on it publicly.

The goal for the MTC was to find and agree upon a new, seismically safer design to replace the current eastern span of the Bay Bridge. Despite the rancor from the Mayors Brown and some local legislators, the MTC board members held their ground and have done their job, all the while keeping the cost to the taxpayer in mind. They should be applauded for a job well done.

San Francisco Chronicle

THE VOICE OF THE WEST

EDITORIALS

Bridge the Differences

MORE THAN a year ago we suggested the design of a new eastern span for the Bay Bridge merited a panel "of international rank," similar to those that were enlisted for the conception of the Golden Gate Bridge or the original Bay Bridge. We reiterated that call on Monday in asking the Metropolitan Transportation Commission to hold off approval on a controversial design that resulted from a more provincial process.

We had hoped the MTC would pause — for no more than a few months — to solicit more ideas from world-class engineers.

The design isn't perfect, but more delays and threats poorly serve Bay Bridge drivers

However, despite the loud objections of some architects, engineers and political leaders from both sides of San Francisco Bay, the MTC this week decided to move forward with its plan for a single-tower suspension bridge.

This leaves critics with several options, all of them likely to generate far more than a few months of delay. The Legislature could undermine the MTC's authority in several ways, including putting the matter to a public vote, but that is unlikely in the face of opposition from Governor Wilson. San Francisco could pursue legal action, citing the plan's potential interference with redevelopment of Yerba Buena and Treasure islands. Or perhaps Mayor Willie Brown could refuse to take that section of

the island from the Navy, thus leaving the new span without its western anchor.

A couple of points need to be considered here. For one, the design that has been made public is "about 30 percent complete," said MTC spokesman Steve Heminger.

"The causeway could look substantially different," he said. By now, Caltrans should have received the clear message that it needs to fine tune this uninspiring design.

Secondly, while Mayor Brown and Oakland Mayor-elect Jerry Brown were right to register their objections and push for a short delay for further review, they should think about the risk of trying to overturn the MTC decision with an all-out battle. Their interests may not be served if the process goes back to square one.

This plan's alignment, north of the existing span, does not cut into the Port of Oakland's expansion plans on the eastern end. And a redeveloped Treasure Island would be worthless if a major earthquake were to disable the existing bridge. This must not be allowed to become a war among petty parochial interests.

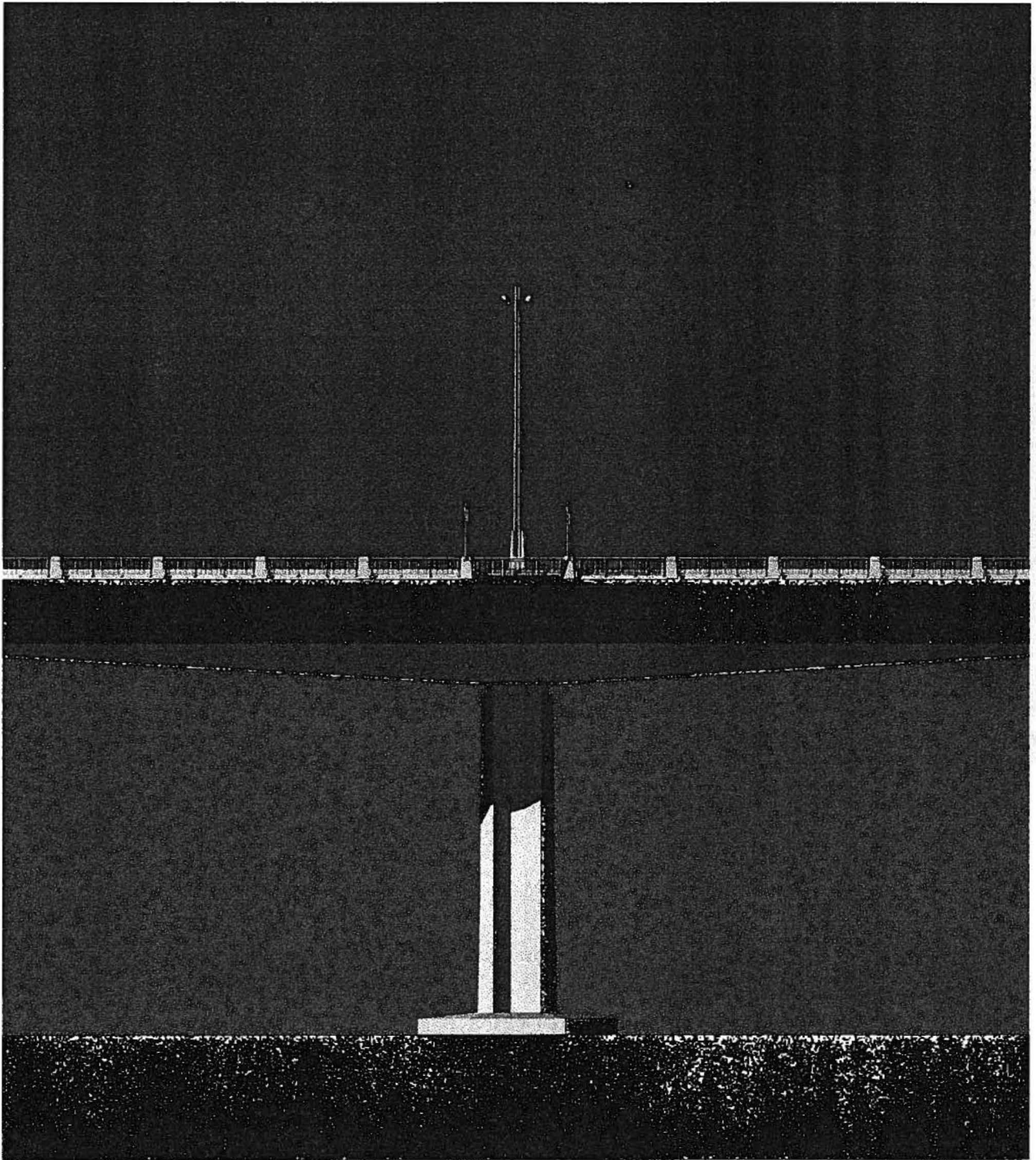
The MTC-approved proposal is not perfect — and it is hard to imagine that there are not better ideas in the world — but it is not the worst option. The worst option is a bridge that could not withstand a 7.1 earthquake centered many miles away, and would take even more lives and time to repair in a strong temblor closer to home.

While we would have preferred a decision that involved a little more time and a few more creative minds, the focus should be on looking for aesthetic and technical improvements for this plan. The region needs a new bridge, not more lawsuits and elections.

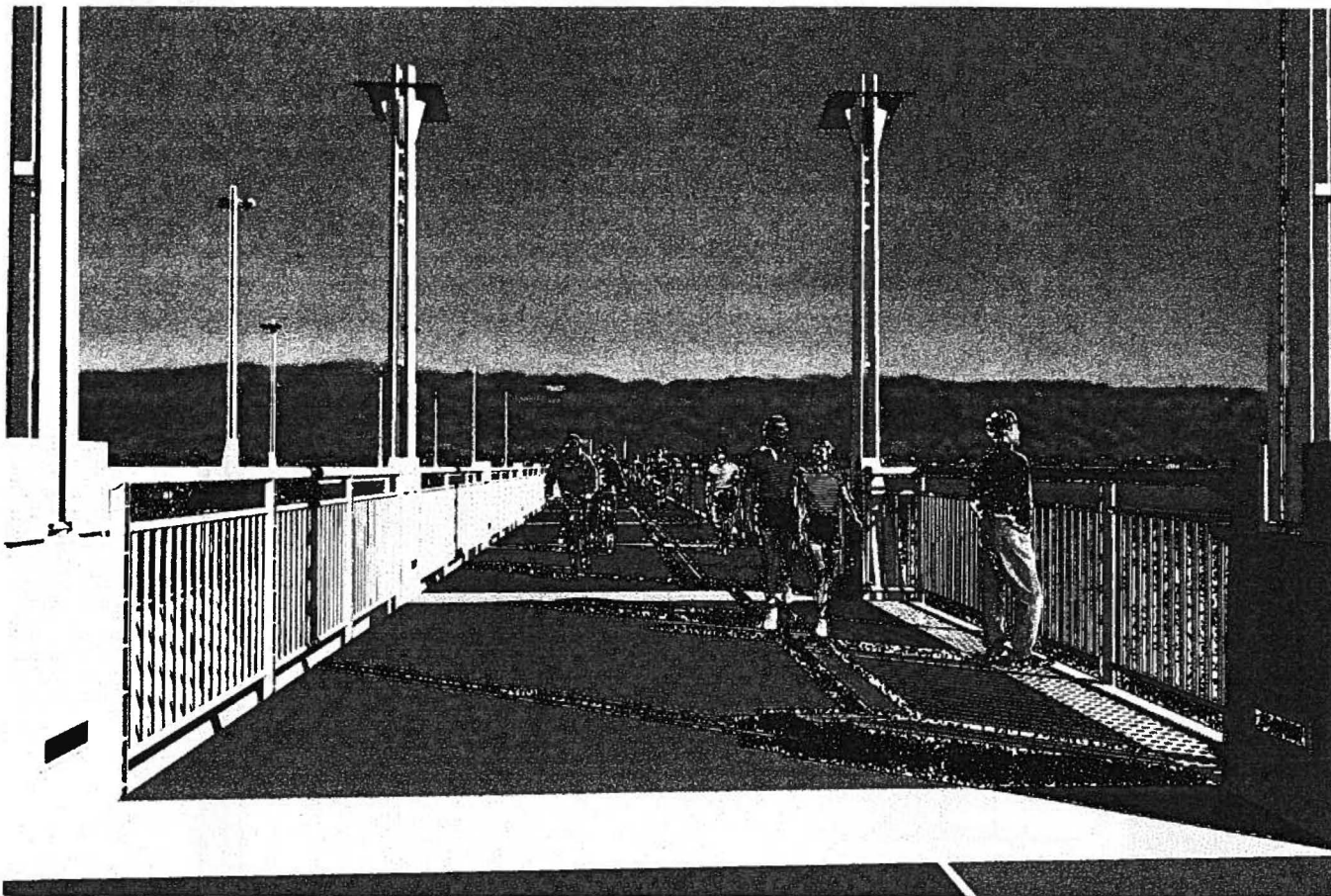
Bay Area Toll Authority
Tentative Schedule for Bay Bridge New Eastern Span 70% Design,
Transbay Terminal and West Span Bike Path Analyses

Activity	Date	Issue
EDAP meeting	October 9, 1998	East Span design issues
BATA Administration meeting	October 14, 1998	1. Transbay Terminal study contract 2. West span bike path design
Bay Bridge Task Force meeting	October 14, 1998	East Span design issues
EDAP meeting	January 4, 1999	East Span design issues
Bay Bridge Task Force meeting	January 13, 1999	East Span design issues
Final environmental impact statement released	February 1999	
EDAP meeting	April 5, 1999	East span design issues
Bay Bridge Task Force meeting	April 14, 1999	East span design issues
BATA WPC	May 14, 1999	Workshop on Transbay Terminal conceptual designs
NEPA record of decision	June 1999	
Right-of-way acquisition begins	June 1999	
EDAP meeting	July 6, 1999	1. West span bike path design 2. East span design issues
BATA WPC	July 14, 1999	Review Transbay Terminal Designs; preliminary cost estimates
Bay Bridge Task Force meeting	July 14, 1999	1. West span bike path design 2. East span design issues
BCDC permit hearing	August 1999	
BATA WPC	September. 10, 1999	Transbay Terminal study results and recommendations
EDAP meeting	October 4, 1999	West span bike path
Bay Bridge Task Force meeting	October 13, 1999	West span bike path recommendations
BATA meeting	October 27, 1999	1. West span bike path decision 2. Transbay Terminal decision
Construction of East Span Bridge begins	March 2000	

AGENDA ITEM NO. 5

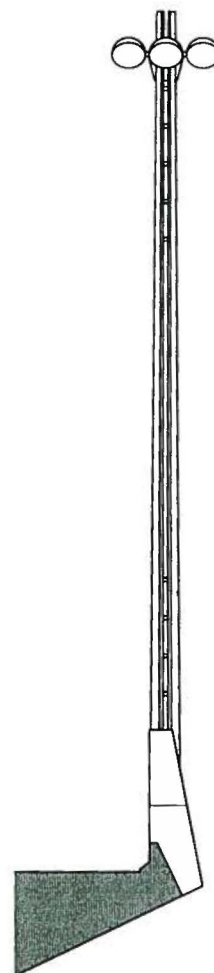
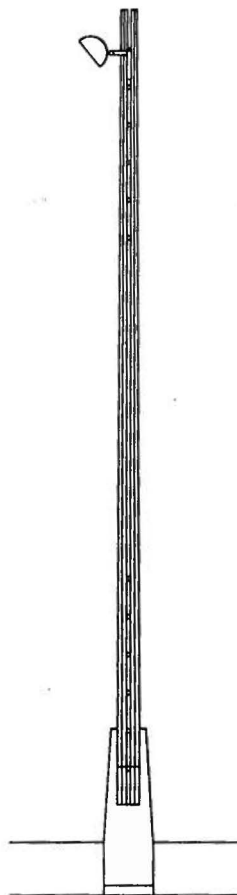


SKYWAY ELEVATION DETAIL

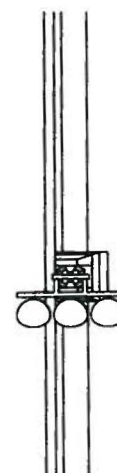
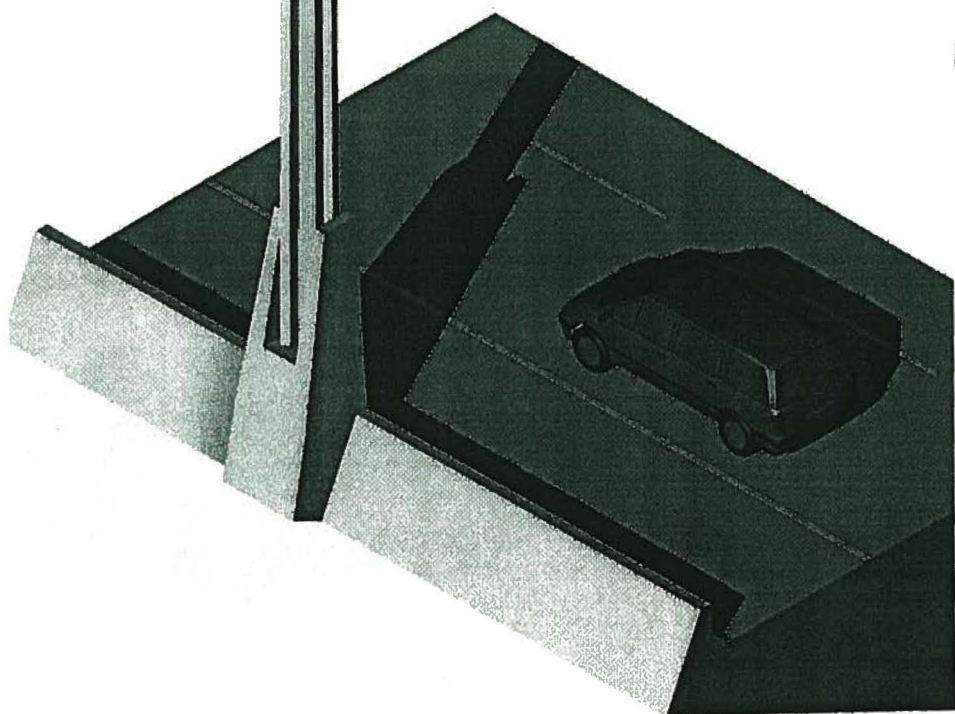


SKYWAY ELEVATION DETAIL

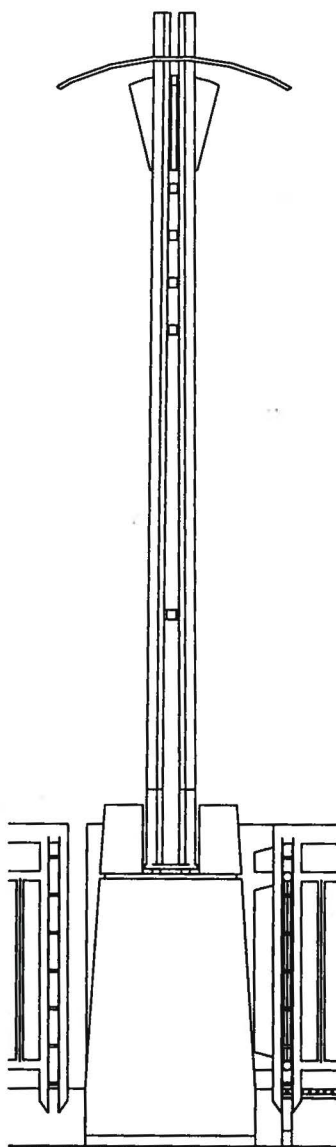
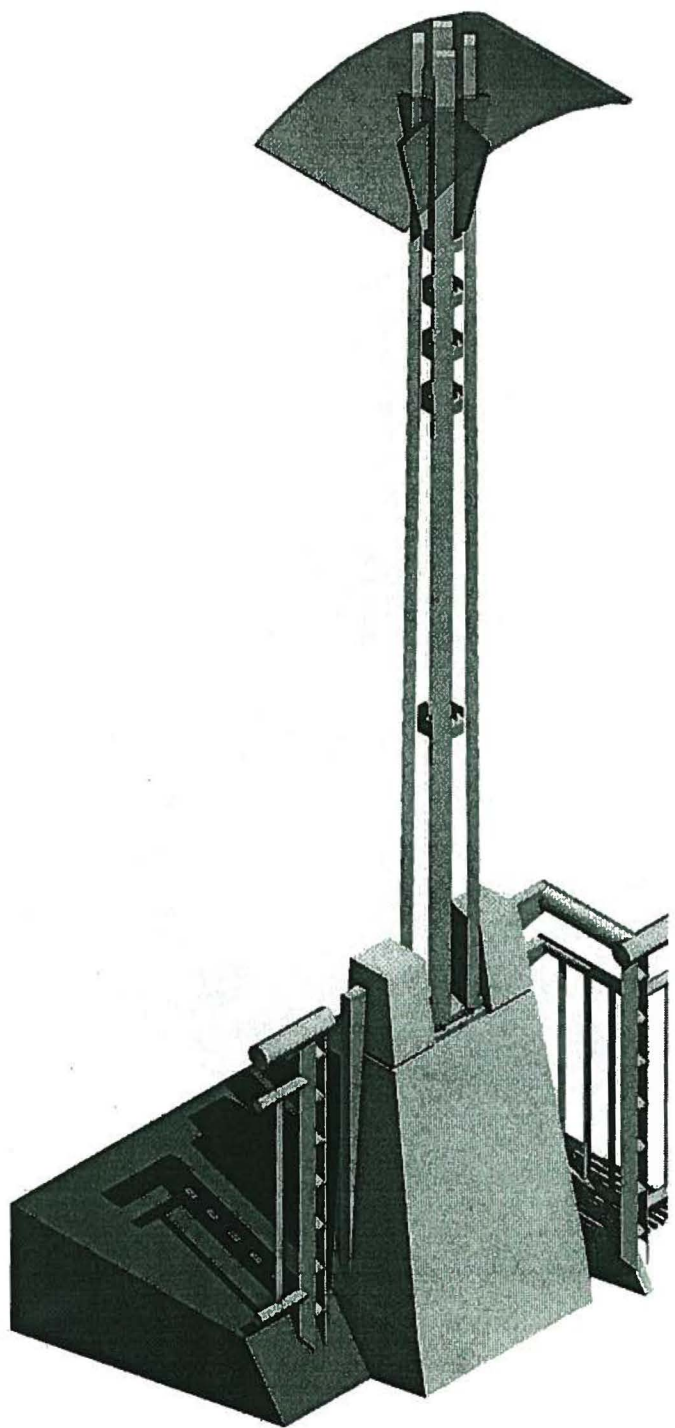
view from roadway



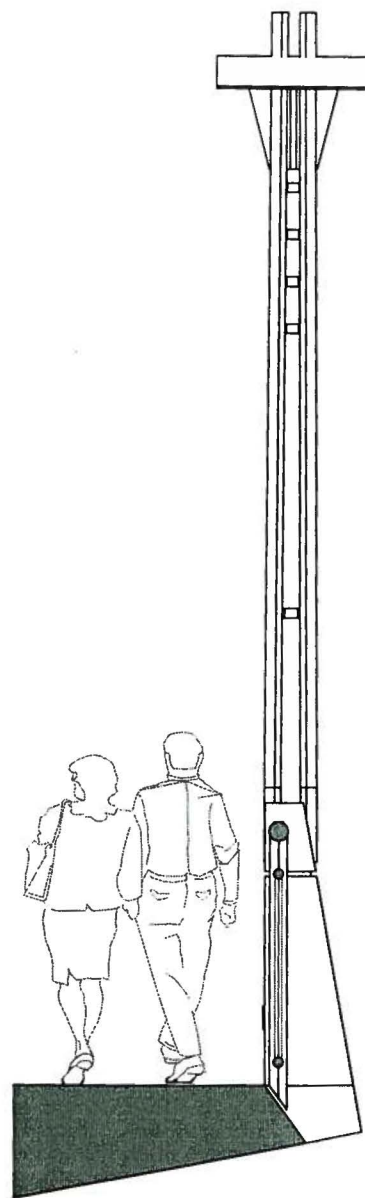
ELEVATIONS



PLAN



ELEVATION



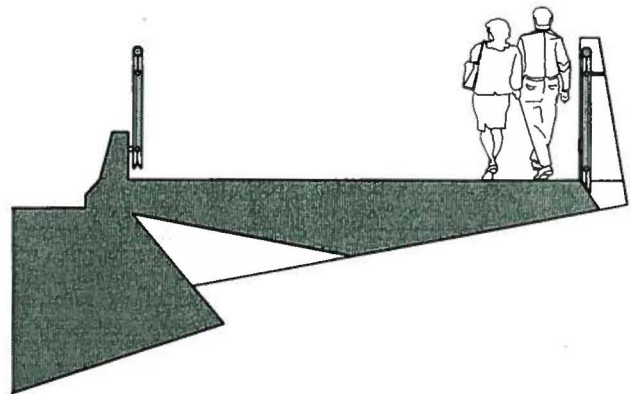
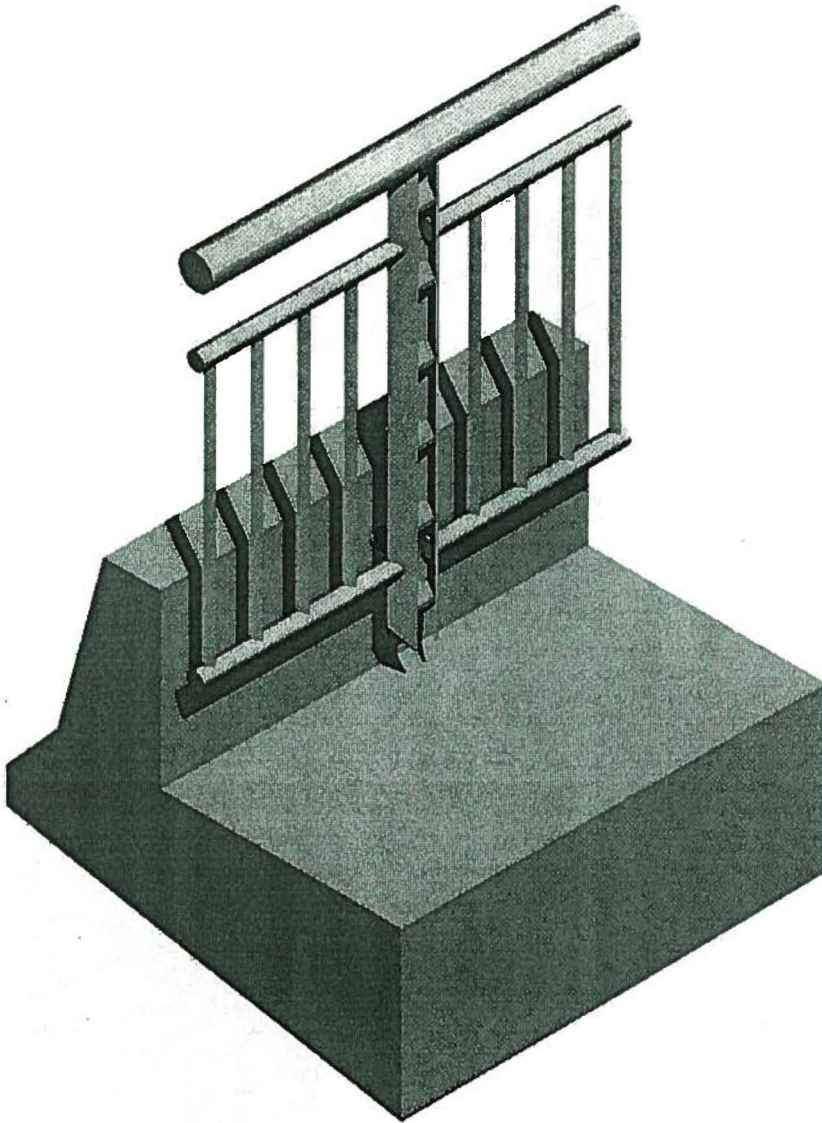
SECTION

PEDESTRIAN / BIKE PATH LIGHT STANDARD

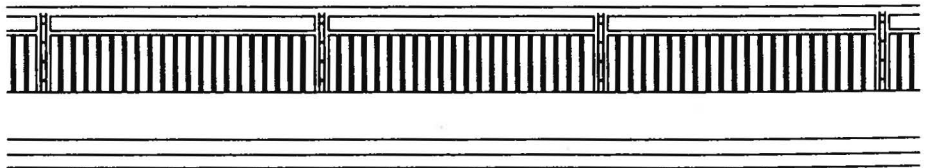
1:10



PATH ELEVATION



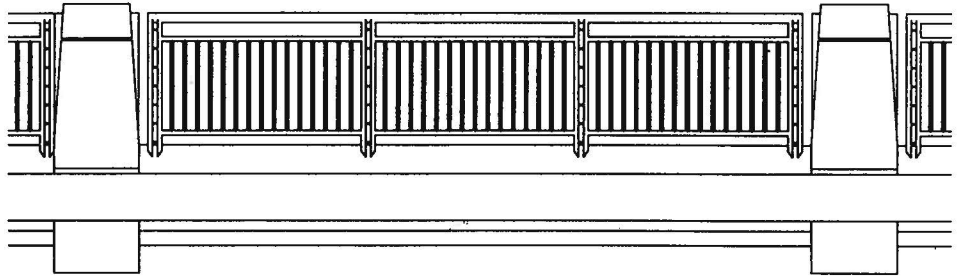
SECTION



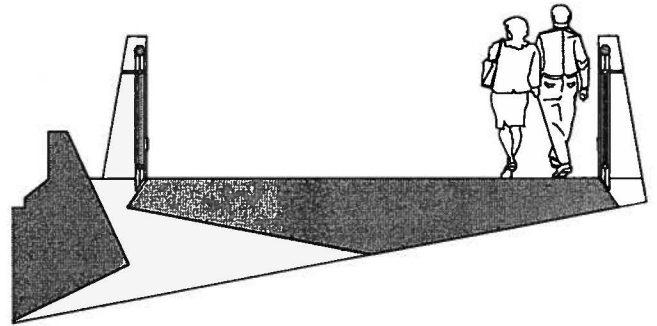
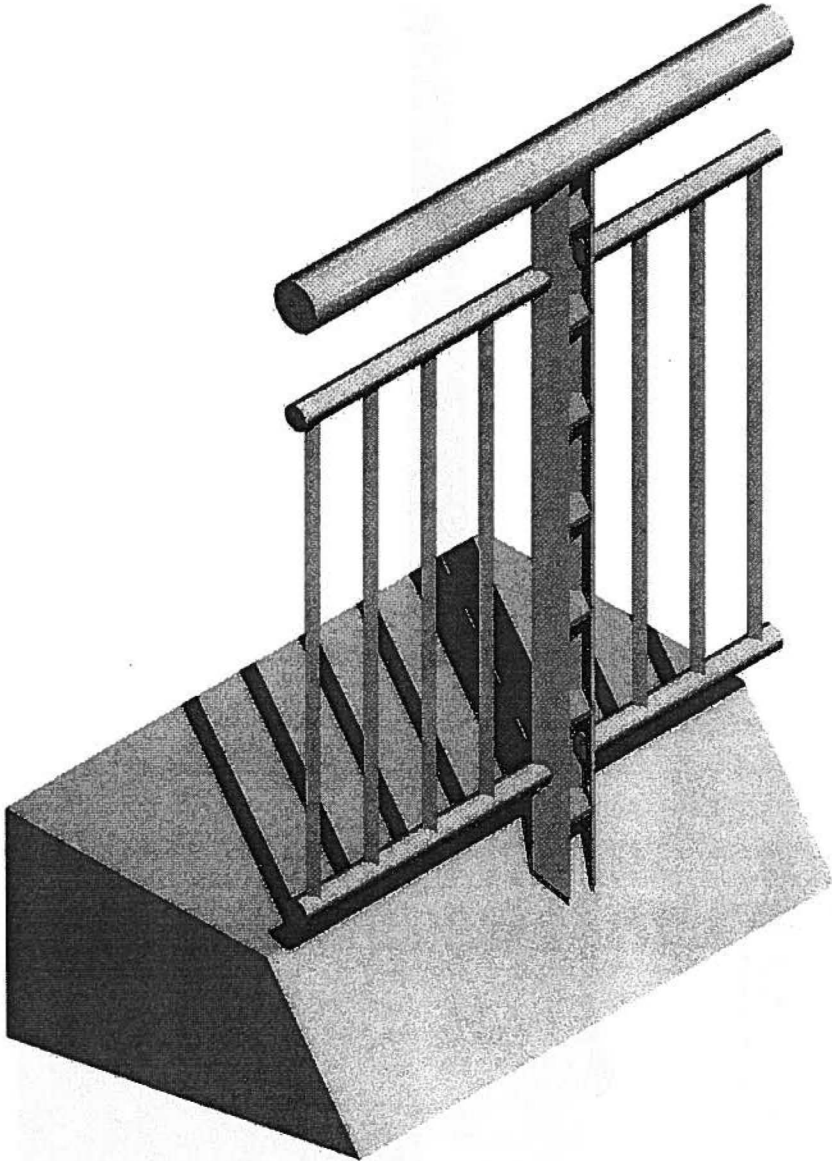
ROAD SIDE ELEVATION

alternate
PEDESTRIAN / BIKE PATH RAILING

1:30



WATER SIDE ELEVATION

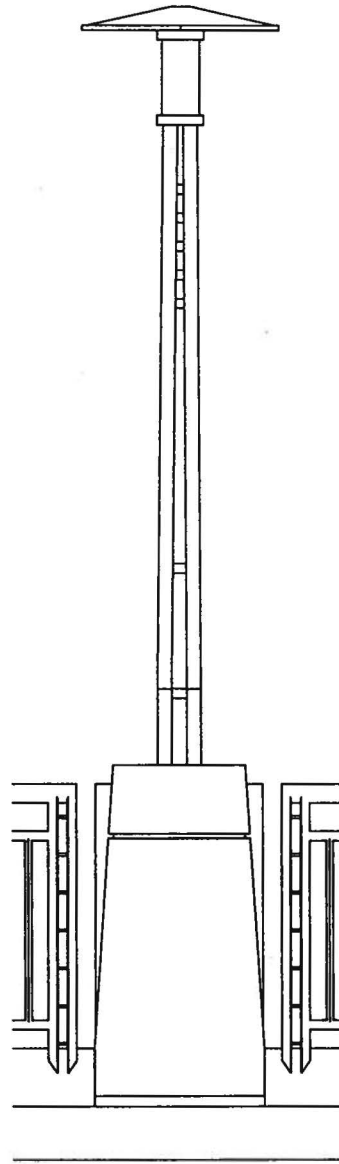
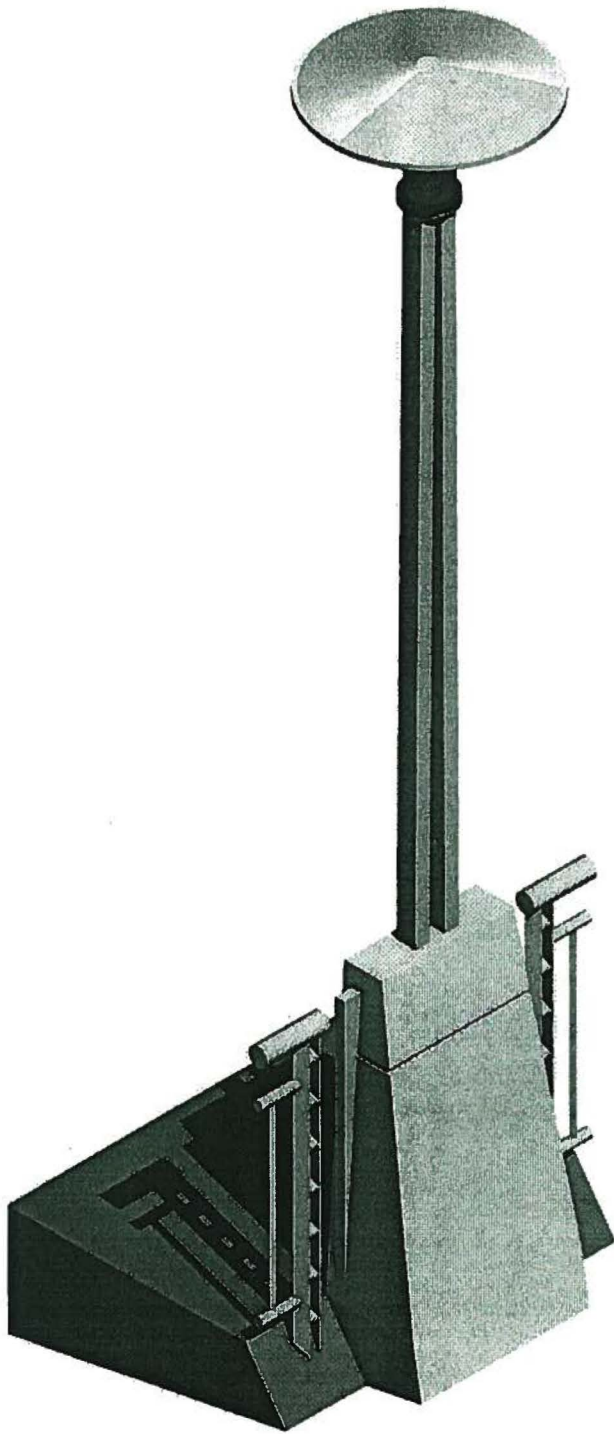


SECTION

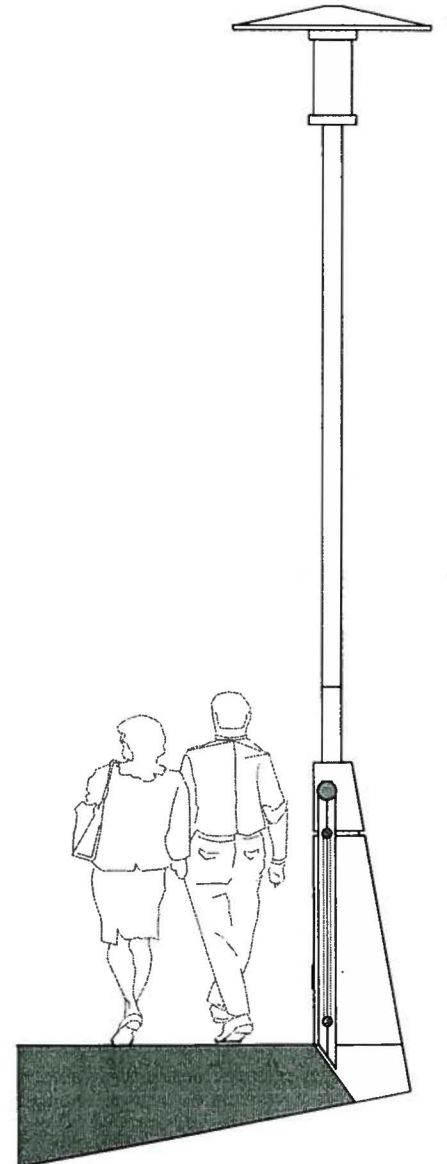


ROAD SIDE ELEVATION

PEDESTRIAN / BIKE PATH RAILING



ELEVATION



SECTION

alternate

PEDESTRIAN / BIKE PATH LIGHT STANDARD

1:10

COWI

Fax Transmission

To MTC, Oakland, California
Fax no. +1 510 464 7848
Attention Mr Steve Heminger
No. of pages 1 (Incl. this page)

Consulting Engineers
and Planners AS

Parallelsvej 15
DK-2800 Lyngby
Denmark

Tel +45 45 97 22 11
Fax +45 45 97 22 12

Bay Bridge - EDAP Meetings

Dear Steve Heminger

Date
28 Sep 1998

Our ref.
10150A/KHO/knl

Thank you for your memo dated August 12, 1998 with schedule of future EDAP meetings.

I have noted all dates, but unfortunately I will not be able to participate in the meeting on October 9.

Please, however, submit - by fax or e-mail* - relevant meeting material in advance and I shall do my best to respond with my views as appropriate to the Chairman prior to the meeting.

Yours sincerely



K.H. OSTENFELD

*Paul -
P/s. do
- Steve*

*) Fax No.: +45 45 97 21 14
E-mail: kho@cowi.dk



METROPOLITAN
TRANSPORTATION
COMMISSION

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
Tel.: 510.464.7700
TTY/TDD: 510.464.7769
Fax: 510.464.7848
e-mail: info@mtc.ca.gov
Web site: www.mtc.ca.gov

September 30, 1998

James P. Spering, Chair
Solano County and Cities

James T. Beall Jr., Vice Chair
Santa Clara County

Keith Axtell
U.S. Department of Housing
and Urban Development

Jane Baker
Cities of San Mateo County

Sharon J. Brown
Cities of Contra Costa County

Mark DeSaulnier
Contra Costa County

Dorene M. Giacomini
U.S. Department of Transportation

Mary Griffin
San Mateo County

Elitu Harris
Cities of Alameda County

Tom Hsieh
City and County of San Francisco

Mary V. King
Alameda County

Steve Kinsey
Marin County and Cities

Jean McCown
Cities of Santa Clara County

Charlotte B. Powers
Association of Bay Area Governments

Jon Rubin
San Francisco Mayor's Appointee

Angelo J. Siracusa
San Francisco Bay Conservation
and Development Commission

Kathryn Winter
Napa County and Cities

Sharon Wright
Sonoma County and Cities

Harry Yabata
State Business, Transportation
and Housing Agency

Lawrence D. Dabms
Executive Director

William F. Hein
Deputy Executive Director

R. Schuetze
1236 Pine Creek Way
Concord, CA 94520

Dear R. Schuetze:

Thank you for your recent comments regarding the design of the approved bicycle/pedestrian path on the new eastern span of the San Francisco-Oakland Bay Bridge, and your suggestions regarding the proposal for such a path on the west span.

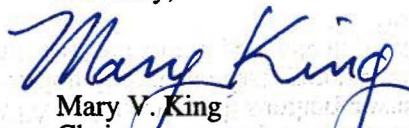
The Engineering and Design Advisory Panel (EDAP) to the Bay Bridge Design Task Force recommended that bicycle/pedestrian access be accommodated with a single path on the south side of the eastbound deck, "with a width and height (relative to the deck) adequate to ensure the safety and comfort of path users and protect the views of motorists." Caltrans and MTC staff have concluded that a path 15.5 feet wide and one foot above the roadway deck will satisfy EDAP's criteria for the safety and convenience of both path users and motorists. That staff recommendation was approved by the Task Force as well as the Bay Area Toll Authority (BATA) in June 1998.

Regarding your suggestions on the design of the west span of the bridge, while Assembly Bill 2038 did expand the list of allowable uses for revenues generated from a \$1 surcharge on the region's toll bridges, it did not increase the total amount of funding available for Bay Bridge "amenities." In the resolution adopted by BATA in June, the toll surcharge was extended for approximately 15 months to pay for the suspension design and east span bicycle/pedestrian path amenities. That leaves a balance of nine months (which would generate approximately \$90 million) for the two remaining eligible amenities: improvements to the Transbay Transit Terminal and the west span bicycle/pedestrian path.

Although environmental documents and the design for the seismic retrofit of the west span are already complete, and Caltrans has begun the retrofit work, future provision of a bicycle/pedestrian path is not precluded, should enough money be available after other amenities have been paid for. The Bay Bridge Design Task Force will convene another series of public meetings, beginning in October, to review remaining design issues associated with the new eastern span as well as preliminary design questions concerning the west span bicycle/pedestrian path.

I appreciate your interest in bicycle/pedestrian access and your continued participation in our decision-making process as we attempt to reconcile the wishes of Bay Area residents with the realities of constrained funding for the new Bay Bridge.

Sincerely,


Mary V. King
Chair
MTC Bay Bridge Design Task Force